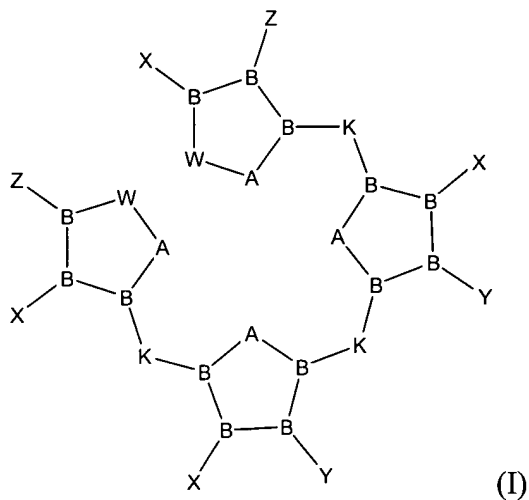


CLAIM LISTING

Claim 1 (Currently Amended): A method for ~~modulating cell proliferation or promoting~~ colon adenocarcinoma cell differentiation, comprising treating a colon adenocarcinoma cell with a bilin.

Claims 2-9 (Cancelled)

Claim 10 (Currently Amended): A method for ~~regulating~~ promoting differentiation of a colon adenocarcinoma cell, comprising treating a colon adenocarcinoma cell with a bilin represented by the general formula (I):



wherein W represents $-\text{CL}_2-$, $-\text{C}(=\text{O})-$, $-\text{C}(=\text{S})-$, $-\text{C}(=\text{NH})-$, or $=\text{CL}-$;

X represents a substituted or unsubstituted alkyl, alkenyl, or alkynyl group;

Y represents a substituted or unsubstituted alkyl, alkenyl, or alkynyl group;

Z represents a substituted or unsubstituted alkyl, alkenyl, or alkynyl group;

A represents $-\text{NH}-$ or $-\text{N}=-$;

B represents a trisubstituted, sp^2 -hybridized carbon atom;

K represents $=\text{CL}-$ or $-\text{CL}_2-$; and

L represents H or lower alkyl.

Claims 11-13 (Cancelled)

Claim 14 (Original): The method of claim 10, wherein the cell is contacted with the bilin *in vitro*.

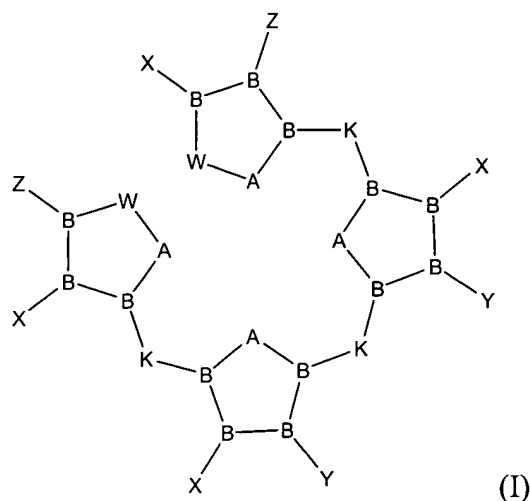
Claim 15 (Original): The method of claim 10, wherein the cell is contacted with the bilin *in vivo*.

Claim 16 (Currently Amended): The method of claim 15, wherein the bilin is administered as part of a therapeutic or cosmetic application.

Claim 17 (Currently Amended): The method of claim 16, wherein the therapeutic or cosmetic application is selected from the group consisting of regulation of neural tissues, bone and cartilage formation and repair, regulation of spermatogenesis, regulation of smooth muscle, regulation of lung, regulation of liver, regulation of pancreas, regulation of small intestine, regulation of spleen, and other organs arising from the primitive gut, regulation of hematopoietic function[[,]] and regulation of skin and hair growth, etc.

Claim 18 (Currently Amended): A ~~pharmaceutica~~ pharmaceutical preparation for promoting differentiation of a colon adenocarcinoma cell comprising a sterile pharmaceutical excipient and a bilin.

Claim 19 (Currently Amended): A pharmaceutical preparation for promoting differentiation of a colon adenocarcinoma cell comprising a sterile pharmaceutical excipient and a bilin represented by the general formula (I):



wherein W represents $-\text{CL}_2-$, $-\text{C}(=\text{O})-$, $-\text{C}(=\text{S})-$, $-\text{C}(=\text{NH})-$, or $=\text{CL}-$;

X represents a substituted or unsubstituted alkyl, alkenyl, or alkynyl group;

Y represents a substituted or unsubstituted alkyl, alkenyl, or alkynyl group;

Z represents a substituted or unsubstituted alkyl, alkenyl, or alkynyl group;

A represents $-\text{NH}-$ or $-\text{N}=-$;

B represents a trisubstituted, sp^2 -hybridized carbon atom;

K represents $=\text{CL}-$ or $-\text{CL}_2-$; and

L represents H or lower alkyl.

Claim 20 (Original): A method for treating unwanted cell proliferation, comprising administering to a patient the pharmaceutical preparation of claim 18 or 19.

Claim 21 (Original): The method of claim 1, wherein the bilin is bilirubin or biliverdine.

Claim 22 (Cancelled)

Claim 23 (Original): The method of claim 10, wherein the bilin is bilirubin or biliverdine.

Claim 24 (Original) The preparation of claim 18 or 19, wherein the bilin is bilirubin or biliverdine.